

Maryland Health Care Commission

Primary Percutaneous Coronary Intervention (PCI) Programs in Hospitals without On-Site Cardiac Surgery

Source: Maryland STEMI (Primary PCI) Data Registry – 03/19/2009

Under the primary PCI waiver program, hospitals without on-site cardiac surgery may provide PCI services to patients meeting certain eligibility criteria.¹ The hospitals are required to collect data on all patients with ST-segment elevation myocardial infarction (STEMI). Door-to-balloon (DTB) time is typically recorded as the difference in minutes between the patient's arrival in the hospital's emergency room and the time of first device use. In the registry database, exceptions to this calculation method most commonly occur when the patient arrives with a *history* of chest discomfort but a normal or non-diagnostic initial (first) electrocardiogram (ECG). *If and only if* the first ECG is normal/non-diagnostic *and* is entered into the database for review and confirmation along with a second ECG showing STEMI, then the date and time of the second (diagnostic) ECG are used as the "door" or "clock start" time to calculate DTB time. This same algorithm is applied to patients already hospitalized: the "door" ECG is the first ECG recorded showing STEMI.

Primary PCI volume², median DTB time, and number and percentage of patients by DTB ≤ 120 minutes or > 120 minutes at Maryland hospitals performing primary PCI under waivers from the Maryland Health Care Commission, calendar year 2008.

	Total pPCI Volume	Median DTB (Minutes)	≤ 120 Minutes (N)	≤ 120 Minutes (%)	> 120 Minutes (N)	> 120 Minutes (%)
1st Quarter 2008 (January 1 - March 31)						
Anne Arundel Medical Center	28	79.5	25	89	3	11
Baltimore Washington Medical Center	33	80	30	91	3	9
Doctors Community Hospital ³	2	101.5	2	100	0	0
Franklin Square Hospital Center	29	74	27	93	2	7
Frederick Memorial Hospital ⁴	4	58	4	100	0	0
Holy Cross Hospital	19	84	19	100	0	0
Howard County General Hospital	16	97.5	13	81	3	19
Johns Hopkins Bayview Medical Center	11	82	10	91	1	9
St. Agnes Hospital	17	104	12	71	5	29
Shady Grove Adventist Hospital	21	77	19	90	2	10
Southern Maryland Hospital Center	23	79	22	96	1	4
Washington County Hospital ⁵	3	92	3	100	0	0
2nd Quarter 2008 (April 1 - June 30)						
Anne Arundel Medical Center	31	93	26	84	5	16
Baltimore Washington Medical Center	41	68.5	41	100	0	0
Franklin Square Hospital Center	22	82	20	91	2	9
Frederick Memorial Hospital ⁴	32	59.5	28	88	4	13
Holy Cross Hospital	17	76	16	94	1	6
Howard County General Hospital	13	83	11	85	2	15
Johns Hopkins Bayview Medical Center	16	76	16	100	0	0
St. Agnes Hospital	10	103.5	9	90	1	10
Shady Grove Adventist Hospital	25	70	23	92	2	8
Southern Maryland Hospital Center	24	76	23	96	1	4
Upper Chesapeake Medical Center ⁶	25	93.5	22	88	3	12
Washington County Hospital ⁵	25	81	22	88	3	12

See footnotes at end of table. Percentages may not total 100 due to rounding.

	Total pPCI Volume	Median DTB (minutes)	≤ 120 Minutes (N)	≤ 120 Minutes (%)	> 120 Minutes (N)	> 120 Minutes (%)
3rd Quarter 2008 (July 1 - September 30)						
Anne Arundel Medical Center	23	91	22	96	1	4
Baltimore Washington Medical Center	20	67	19	95	1	5
Franklin Square Hospital Center	16	75	14	88	2	13
Frederick Memorial Hospital ⁴	28	56	28	100	0	0
Holy Cross Hospital	15	77	15	100	0	0
Howard County General Hospital	20	81.5	19	95	1	5
Johns Hopkins Bayview Medical Center	16	78	14	88	2	13
St. Agnes Hospital	16	85	12	75	4	25
Shady Grove Adventist Hospital	19	78	18	95	1	5
Southern Maryland Hospital Center	19	97	15	79	4	21
Upper Chesapeake Medical Center ⁶	18	76	17	94	1	6
Washington County Hospital ⁵	17	82	15	88	2	12

4th Quarter 2008 (October 1 - December 31)

Anne Arundel Medical Center	19	83.5	17	89	2	11
Baltimore Washington Medical Center	30	69	29	97	1	3
Carroll Hospital Center ⁷	16	71	15	94	1	6
Franklin Square Hospital Center	24	89	22	92	2	8
Frederick Memorial Hospital ⁴	30	52	30	100	0	0
Holy Cross Hospital	23	91	20	87	3	13
Howard County General Hospital	17	85	16	94	1	6
Johns Hopkins Bayview Medical Center	10	88	8	80	2	20
St. Agnes Hospital	16	87.5	14	88	2	13
Shady Grove Adventist Hospital	19	79.5	17	89	2	11
Southern Maryland Hospital Center	28	87	25	89	3	11
Upper Chesapeake Medical Center ⁶	35	73.5	32	91	3	9
Washington County Hospital ⁵	22	79.5	22	100	0	0

January 1, 2008 – December 31, 2008

Anne Arundel Medical Center	101	88	90	89	11	11
Baltimore Washington Medical Center	124	72.5	119	96	5	4
Carroll Hospital Center ⁷	16	71	15	94	1	6
Doctors Community Hospital ³	2	101.5	2	100	0	0
Franklin Square Hospital Center	91	77	83	91	8	9
Frederick Memorial Hospital ⁴	94	55	90	96	4	4
Holy Cross Hospital	74	85	70	95	4	5
Howard County General Hospital	66	85	59	89	7	11
Johns Hopkins Bayview Medical Center	53	79	48	91	5	9
St. Agnes Hospital	59	92.5	47	80	12	20
Shady Grove Adventist Hospital	84	74	77	92	7	8
Southern Maryland Hospital Center	94	83	85	90	9	10
Upper Chesapeake Medical Center ⁶	78	83	71	91	7	9
Washington County Hospital ⁵	67	80	62	93	5	7

¹ All patients undergoing PCI were appropriate for primary PCI in settings without on-site cardiac surgery.

² PCI volume – number of patients who had a device (balloon, stent, thrombectomy) used that is designed to open the infarction-related artery. The first device used is almost always a balloon-type device, but occasionally is a thrombectomy device.

³ Doctors Community Hospital relinquished its primary PCI waiver, effective January 31, 2008.

⁴ Frederick Memorial Hospital initiated primary PCI services on March 14, 2008.

⁵ Washington County Hospital initiated primary PCI services on March 15, 2008.

⁶ Upper Chesapeake Medical Center initiated primary PCI services on April 4, 2008.

⁷ Carroll Hospital Center initiated primary PCI services on October 13, 2008.